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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,753

02/06/2004

Robert J. Hamers

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23524 7590 11/29/2007
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EXAMINER

CROW, ROBERT THOMAS

ART UNIT

PAPER NUMBER

1634

MAIL DATE

DELIVERY MODE

11/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/773,753	Applicant(s) HAMERS ET AL.	
	Examiner Robert T. Crow	Art Unit 1634	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: None.
 Claim(s) objected to: None.
 Claim(s) rejected: 1-11 and 32-37.
 Claim(s) withdrawn from consideration: 12-24.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 10/2007
 13. ☐ Other: _____



/Jehanne Sitton/
Primary examiner
11/28/2007

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues on pages 7-8 of the Remarks filed 11 July 2007 that the examiner has mischaracterized the last three lines of claim 1 and Figure 5 of the specification, and that both of the biomolecules of claim 1 must be covalently linked to their respective substrates,

A review of the specification yields no limiting definition of the instantly claimed "biomolecules" as being limited to single stranded nucleic acids; i.e., the specification does not prohibit the biomolecule from being a double stranded nucleic acid molecule having one strand covalently linked to a surface or a nanotube.

Thus, as detailed in the previous Office Action, the instantly claimed "at least one biomolecule" is interpreted as the double stranded nucleic acid formed by hybridization between analyte 15 A and binding agent 16, which is covalently linked to substrate 20 (Figures 2C-D or Fish et al). The complementary biomolecule 26a, which is covalently attached to nanocylinder 26, hybridizes to the covalently bound double stranded biomolecule (15a+16) as illustrated in Figure 2C. Thus, the covalently surface-bound double stranded biomolecule, in the form of 15a hybridized to 16, attaches nanocylinder 26 to surface 20 through the biomolecular interaction of hybridization between the covalently nanocylinder-bound complementary biomolecule 26b and the covalently bound double stranded biomolecule 15a+16, and the claim has been given the broadest reasonable interpretation consistent with the teachings of the specification regarding "biomolecules" (In re Hyatt, 211 F.3d1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000) (see MPEP 2111 [R-1])).

Applicant argues on page 8 of the Remarks that Figure 5 does not show the embodiment pending in claims 1, 32, and 37 because Figure 5 does not show attachment of the nanocylinder to the substrate between a biomolecule covalently bound to the substrate and a complementary biomolecule covalently bound to a nanocylinder.

However, as noted above, the specification yields no limiting definition of the instantly claimed "biomolecules" as being limited to single stranded nucleic acids; i.e., the specification does not prohibit the biomolecule from being a double stranded nucleic acid molecule having one strand covalently linked to a surface or a nanotube.

Thus, the covalently bound double stranded molecules of Figure 5 are interpreted and a single covalently bound biomolecule as detailed above, and Figure 5 does show an embodiment of the instantly claimed invention.

Applicant further argues on pages 8-9 of the Remarks that it would not be obvious to modify Fish et al to include a covalent bond, directly or indirectly, between the analyte and either the electrode surface or a nanotube.

However, this argument is confusing because Fish et al requires no such modification, nor has any rejection been presented using such modification.

Applicant's remaining arguments regarding dependent claims 2-11 and 33-36 rely on arguments set forth to address the rejections of independent claims 1 and 32 under 35 USC 102(a,e). Since the arguments regarding independent claims 1 and 32 were not persuasive, the rejections of the dependent claims are maintained.

